

ABSTRACT

Title : “POST PRANDIAL HYPERTRIGLYCERIDEMIA IN PATIENTS WITH CAD AND WITHOUT CAD- A COMPARATIVE STUDY”

Background and objective :

Coronary Artery disease is the leading cause of death in developing countries. Out of the many risk factors like Diabetes Mellitus, Hypertension and Smoking, Dyslipidemia is one of the major modifiable risk factor. A lipid profile consists of total cholesterol, Triglycerides LDL, VLDL & HDL. Out of these, a raised triglyceride level carries an important risk. 1/5th of the Triglycerides is the VLDL. Out of these, HDL is known as good cholesterol & its elevation is associated with decreased risk of CAD. Postprandial hypertriglyceridemia has been reported to be a predisposing factor for coronary events.

In Indian population, CAD develops a decade earlier than those in western population. Hence a deeper study into the lipid profile is required to prevent the incidence of CAD.

In our life we spend more than 6hrs in post prandial state during the day. So even if fasting triglyceride is normal, the transient post prandial surge in triglyceride level may contribute to increased incidence of atherosclerosis, and maybe the missing culprit in certain cases.

In this dissertation, we did a comparative study about the variation in hypertriglyceridemia in patients with CAD and those without CAD.

MATERIALS AND METHODS

The present study was a Descriptive Comparative study done for a duration of 18 months carried out in 120 patients presenting with chest pain suspected to be of cardiogenic origin in the Department of General Medicine and Department of Cardiology, Sree Mookambika Institute of Medical Sciences who satisfied the inclusion criteria. The study was initiated after obtaining ethical clearance from the institutions ethical clearance committee. The patients were included for the study after taking an informed written consent from all the subjects Group A included patients who were diagnosed with CAD either by ECG (STEMI, NSTEMI), TMT, ECHO (RWMA) CAG (single vessel or multi vessel disease) ,Group B included patients who had no CAD. Fasting and post prandial triglyceride level in mg/dl were done by using the enzymatic method and fully automated Beckmann's coulter 480

The data that was collected on a pre-structured proforma was then entered into Microsoft Excel 2007 file for the purpose of data and statistical analysis.

DATA AND STATISTICAL ANALYSIS

The collected data was analyzed using mean, mode for demographic data and frequency percentage for the analysis of the clinical data. Statistical Analysis was done using SPSS software version 23.0. Significant level decided before starting of study was set at $p \leq 0.05$ 95% confidence , hence 'p' value less than 0.05 ($p < 0.05$) is considered significant.

Results and observations

In our study we had total of 120 cases with 60 cases in each group, ie with and without coronary artery disease. The mean age in our study groups were 53.05 years in the group with coronary artery disease and 50.55 years in the group without coronary artery disease. There was no statistical difference between the two groups, so the groups are comparable. In, those with CAD most cases were males, most cases in the non –CAD group were housewives as compared to professionals in the coronary artery disease group. There was a statistically significant difference in the fasting lipids & the postprandial lipids in the two groups. The postprandial lipids were more reliable in our study.

CONCLUSION

According to our results and in contrast with other studies it could be concluded that evaluation of high level of postprandial Triglyceride would be a more reliable test than fasting TG to investigate the disease condition in patients whom suffer from CAD.